

ARINGTON Farm--1911

W. J. Morse

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Variety Trial.

No.	Color of Seed			Fl. color.	First Pods mature	Cf.	Seed Color
01533				8/30 W			S.Y.
01534				8/1 P			S.Y.
01535							Bl.
01536							S.Y.
01537				7/25			Gr.
01538							Y.
01539				7/25 P W			Bl.
01547				7/5 P W			S.Y.
01553				8/17 W			Y.
01554							O.Y.
01592				8/1 P W			Bl.
01593				7/25 P W			O.Y.
01594				7/5 P			Y.
01595				7/5 P			Br.
01596				7/5 P			Bl.
01597							Gr.
01598				7/5 W			Ey. B.
01622				8/1 P		17254-	Bl.
01623				8/1 P		17254.	Bl.
01624				8/1 P		17269.	Y.
17277E				8/1 P W			S.Y.
17861		X					Bl.
20001							O.Y.
20405		X					S.Y.

		Fl. color	Fruit Pods mature		seed color.
20406					S.Y.
20407					Br. & Bl.
20412					Br.
20854				17261	Gr.
21079	+				O.Y.
21999	+	8/1	P W		Bl. & O
22312	x	8/1	P	17280	S.Y.
22318A		8/30	W	17280	S.Y.
22379		8/1	P W		S.Y.
22406					Bl.
22498					S.Y.
22503				19981	S.Y.
22504A				19981	S.Y.
22506					S.Y.
22536					Gr.
22645		8/1	P W		O.Y.
22876	T				S.Y.
22878				17273	S.Y.
22882				22504A	S.Y.
22884				17273	S.Y.
22885				22504A	S.Y.
22897		8/1	P W	17857	Gr.
22927		8/1	P W	14952	Bl.
23205		8/1	P W	17254	Bl.

	Fl. color	First Pods mature	Cf -	Seed color
23292				S.Y.
23306			17857	Bl.
24183			17275	O.Y.
25131	8/1	P	17269	S.Y.
25649			17273	S.Y.
25650			17273	S.Y.
25652	8/1	P W		
25657			16790	Bl.
25658	8/17	P W		
26236	8/30	W	17280	S.Y.
26237				
26644	7/25	P		
26646			17273	S.Y.
27196	8/17	P		
27197				
27198	8/17	P W		
27499				
27535	7/5	F		
27557	8/1	P W	17263	O.Y.
27707	8/17	P W		
27890				
27891				
28018				
28019				
28020			16790	Bl.

Seed.
Color.

			Fl. color.		First Pods mature		
28049				W			
28050			7/5	P			
28051			8/17	P			
30478			8/17	P		21999	Bl. & O.Y.
30593							
30594							
30595							
30596			7/25	P W			
30597			8/1	P W			
30598							
30599			7/5	P			
30600			7/5	P			
30601							
17254			7/25	P W			
19981	+		7/25	P			
16790	+		8/1	P W			
17261			8/1	P			
17263			8/1	P W			
17269	+		8/1	P W			
17857	+		8/1	P W			
17275	+		8/1	P			
28127			8/1	P			
17280	+		8/1	P W			
20797	+		9/12	P			
26858			8/17	P W			

Composition of Different Part of Soybean Plant.

17269 - Wld. Yellow	Water	Fiber	Protein	Fats	N. F. Ext.	Ash
Plant just in bloom.						
Leaves. ✓						
Stalk. ✓						
Roots. ✓						
Plant & pods/grown						
Leaves.						
Stalk ✓						
Pods.						
Roots						
Plant Mature for hay						
Leaves.						
Stalk ✓						
Pods full grown.						
Seed						
Roots						
Plant Mature						
Leaves						
Stalk						
Pods						
Seed						
Roots.						
Variety.						

17280 - Mammoth		Water	Fiber	Protein	N-Free.st. Fat		Ash
					Pote	N-Free.st.	
Plant just in bloom							
Leaves	0059	5.72	14.65	19.56	49.85	2.08	8.14
Stalk	0058	4.72	43.31	10.44	35.43	.56	5.54
Root.	0057	5.33	45.76	9.31	32.66	.76	6.18
Plants pods ^{seed} $\frac{1}{2}$ grown	0064	5.84	8.07	37.38	30.45	12.02	6.24
Leaves	0062	6.04	14.87	19.56	47.06	2.61	9.86
Stalks	0061	3.82	43.67	12.34	34.97	.45	4.75
Pods	0063	5.57	25.31	18.53	41.03	1.50	8.06
Roots	0060	5.21	46.85	8.75	32.88	.93	5.38
Plants mature for hay							
Leaves							
Stalks	0066	4.84	57.72	3.33	30.86	.67	2.58
Pods full grown	0068	6.53	35.24	5.26	30.86	1.40	6.19
Seeds	0069	5.36	4.64	37.56	29.28	18.61	4.55
Roots	0065	4.91	57.09	3.59	27.00	.56	4.85
Plants mature							
Leaves							
Stalk							
Pods							
Seeds							
Roots							
Variety -							

Time of Planting.

No.	Date Sown	Date of bloom	Height	1st Pods mature	Plant mature	No. of Pods	Season
<i>German</i>							
27755	May 1	June 10	10-16	July 20	Aug. 10		102
	" 15	" 19	10-14	" 28	" 16	35	93
	June 1	July 8	6-10	Aug. 15	Aug. 26	20	87
	June 15	" 17	6-8	" 24	Sept 9	20	86
	July 1	July 28	8-12	Sept. 8	Sept 23	40	85
	July 15	Aug. 12	8-14	" 30	Oct. 10	33	87
	Aug. 1	Sept. 1	6-9	Oct. 20	Oct 24	12	85
	" 15	Sept. 18	4-8	—	3/4 mature	6	—
<i>Buckshot</i>							
7251	May 1	June 10	10-16	Aug. 4	Aug. 20	65	102
	" 15	" 24	12-16	" 15	Sept. 1	90	109
	June 1	July 10	6-12	" 30	" 15	40	107
	" 15	" 24	6-10	Sept. 8	" 20	65	97
	July 1	Aug. 3	12-16	" 20	Oct. 5	72	97
	" 15	" 16	7-12	Oct. 9	" 23	38	100
	Aug. 1	Sept. 4	4-8	Oct 31	Nov. 6	12	98
	" 15	Sept. 19	4-8	—	3/4 mature	6	—
<i>Acuburn</i>							
21099A	May 1	June 15	18-30	Aug. 28	Sept. 20	108	143
	" 15	" 26	24-30	" 30	" 20	140	128
	June 1	July 14	18-28	Sept. 11	" 25	120	117
	" 15	July 25	18-28	" 22	Oct. 2	75	109
	July 1	Aug. 4	22-26	Oct. 2	" 15	90	107
	" 15	" 17	18-22	" 14	" 27	60	104
	Aug. 1	Sept. 5	10-16	Oct 30	Nov. 7	22	99
	" 15	" 20	6-12	—	1/2 mature	15	—

No.	Date sown	Date of bloom	Height	1st Pods mature	Plants mature	No. of Pods	Season
17269	May 1	June 26 ⁵⁹	12-24	Sept. 9	2297.0 Oct. 5	180	158
Melina	" 15	July 3 ⁴⁹	12-24	" 12	2086.2 " 5	220	143
Yellow	June 1	July 21 ⁵¹	12-18	" 22	1853.6 " 5	190	127
	" 15	July 30 ⁴⁵	14-24	Oct. 1	1625.8 " 12	110	119
	July 1	Aug. 11	20-24	Oct. 2	1414.2 " 15	106	107
	" 15	Aug. 22	12-18	Oct. 12	" 25	65	102
	Aug. 1	Sept. 8	8-14	Oct. 30	Nov. 7	25	99
	" 15	Sept. 20	6-10	—	$\frac{5}{8}$ grown	16	—
17267	May 1	July 11	24-32	Oct. 18	Nov. 1	120	185
Tokio	" 15	July 18	18-30	Oct. 27	Nov. 5	95	170
	June 1	Aug. 2	18-30	Oct. 10	Nov. 1	90	154
	" 15	Aug. 8	20-30	Oct. 24	Nov. 1	98	139
	July 1	Aug. 21	18-30	Nov. 15	Nov. 8	120	131
	" 15	Aug. 28	12-20	Oct. 30	Nov. 8	58	116
	Aug. 1	Sept. 11	10-14	—	$\frac{7}{8}$ mature	33	—
	" 15	Sept. 23	6-10	—	Pods forming $\frac{1}{2}$ to 2 in. long	25	—
17271	May 1	July 1	18-24	Sept. 5	Sept. 20	160	144
Haberlandt	" 15	July 8	12-28	Sept. 8	Sept. 22	200	130
+	June 1	July 21	20-28	" 18	Oct. 22	155	124
	" 15	July 30	12-30	" 30	Oct. 12	125	119
	July 1	Aug. 14	12-24	Oct. 9	Oct. 24	120	116
	" 15	Aug. 25	10-18	Oct. 18	Nov. 4	50	112
	Aug. 1	Sept. 9	10-14	Nov. 7	Nov. 7	45	—
	" 15	Sept. 23	8-12	—	$\frac{1}{4}$ mature	15	—

No.	Date sown	Date of bloom	Height	1st pods mature	Plants mature	No. of pods	Grain
17250	May 1	July 6	20-30	—	Nov. 4	165	188
Mammoth	" 15	" 10	16-28	—	Nov. 4	150	183
	June 1	Aug. 2	24-30	—	Nov. 4	152	187
	" 15	Aug. 8	22-30	—	Nov. 4	150	142
X	July 1	Aug. 23	24-30	—	Nov. 10	155 75	133
	" 15	Aug. 28	18-30	Nov. 7	full grown	51	—
	Aug. 1	Sept. 13	16-20	—	$\frac{3}{4}$ mature	31	—
	" 15	Sept. 25	10-14	—	Pods forming $\frac{1}{4}$ in. long.	17	—

16
 13
 30
 30
 15
 123

Width of Row.

Row 8 in. apart.

Sed put in with grain drill at the rate
of one bu. per acre. One-twentieth acre.
field of seed - $\frac{1}{20}$ acre. .75 bu. ^{Palmer} 17852 B
Cal. " " " - $\frac{1}{20}$ " " 22312
Cal yield of seed - $\frac{1}{20}$ " 15 " 17852 B
Cal. " " " - 1 " " 22312.

Sown June 3, Harvested Oct. 5.

Stand -

Bright -

Remarks = Drilled in with wheat drill
at rate of 1 bu. per acre. Poorest plot
of the lot. not so tall growth and nearly
choked out by grass & weeds. This method
will not do. No. 22312 - drilled in
twice but a very weak stand resulted.

Row 18 in. apart.

Sed put in with hand drill at the
rate of $\frac{1}{2}$ bu. per acre. $\frac{1}{20}$ acre.
field of seed - $\frac{1}{20}$ acre. 1.53 bu. 17852 B
" " " - $\frac{1}{20}$ " " 22312
Cal. " " " - 1 " 30.6 " 17852 B
" " " - 1 " " 22312

Sown June 3 ; Harvested - Oct 5

Stand

Height.

Remarks:

No. 17852 B - made a very good growth - No.
22312 however made a poor stand - the
plants badly scattered. No results were
taken of 22312 on account of poor stand.
No. 17852 B - was perfect.

Rows 24 inches apart.

Sown with hand drill at the
rate of $\frac{1}{2}$ bu. per acre. One-twentieth acre
yield of seed $\frac{1}{20}$ acre, 1.55 bu. 17852 B
" " " $\frac{1}{20}$ " " 22312
Cal " " " 1 " 31.00 " 17852 B
" " " " 1 " " 22312

Sown June 3; Harvested Oct. 5 -

Stand.

Height.

Remarks.

Row 30 inches apart.

Sown with hand drill at the rate of $\frac{1}{2}$ bu. per acre. One-twentieth acre yield of seed. $\frac{1}{20}$ acre. bu. 17852 B

" " " $\frac{1}{20}$ " 1.64 " 22312

Cal. " " " 1 " 32.8 " 17852 B

" " " " 1 " ~~29~~ " 22312

Sown June 2, Harvested - ~~Oct 5~~
Stand -

Height.

Remarks:

Row 36 inches apart.

Sown with hand drill at the rate of $\frac{1}{2}$ bu. per acre. One-twentieth acre yield of seed. $\frac{1}{20}$ acre. 1.46 bu. 17852 B

" " " $\frac{1}{20}$ acre. " 22312

Cal. " " " 1 " 29.20 " 17852 B

Cal. yield of seed, 1 acre. bu. 22312

Sown June 1, Harvested

Stand

Height.

Remarks:

Conclusions:

Fertilizer Tests.Plots $1/20$ acre each.

Date Sown - June 2 - $1\frac{1}{2}$ lb. seed to plot.
 Plot I - $7\frac{1}{2}$ lb. Nitrate of Soda.

9 " Muriate of Potash

Sown - June 2 - Variety - Peking (17852B)
 Harvested - Oct. 4.

Yield of seed per plot - 72 lb. = $1\frac{1}{5}$ bu.
 Bus. Cal. per acre - 24 bus.

Plot II - 10 lb. Acid Phosphate

$2\frac{1}{2}$ " Muriate of Potash

Sown June 2. Variety - Peking - (17852B)
 Harvested - Oct. 4.

Yield of seed per plot - 76 lb. = 1.27 bu.
 Bus. Cal. per acre - 25.4 bus.

Plot III - 10 lb. Acid Phosphate

$12\frac{1}{2}$ " Basic Slag.

Sown June 2; Variety Peking (17852B)
 Harvested Oct. 4.

Yield of seed per plot - 80 lb. = 1.33 bu.
 Bus. Cal. per plot - 26.6 bus.

Plot II - Check.

Sown June 2. Variety - Peking (17852B)
Harvested - Oct. 4. Season 124 days
Yield - $\frac{1}{20}$ acre - 83 lb = 1.38 bus
Bus. cal. per acre = 27.6 "

Plot I - 10 lb. Sulfate of Potash
Sown June 2. Variety - Peking (17852B)
Harvested - Oct. 4 = Season = 124 days
Yield - $\frac{1}{20}$ acre - 82 lb = 1.36 bus.
Bus. cal. per acre = 27.3 "

Plot IV - 10 lb. Muriate of Potash
Sown June 2. Variety - Peking (17852B)
Harvested - Oct. 4 = Season 124 days
Yield - $\frac{1}{20}$ acre = 86 $\frac{1}{2}$ lb = 1.43 bus.
Bus. cal. per acre = 28.6 "

Plot VII- 15 lb. Acid Phosphate
 Sown June 2. Variety - Peking (17852B)
 Harvested - Oct. 4. Season 124 days
 Yield - $\frac{1}{2}$ acre 84 lb. = 1.4 bu.
 Bus. cal. per acre - 28 "

Plot VIII- Check.

Sown June 2. Variety - Peking (17852B)
 Harvested - Oct. 4. Season - 124 days
 Yield - $\frac{1}{2}$ acre - 77 lb. = 1.28 bu.
 Bus. cal. per acre - 25.6 bu.

Plot IX- 15 lb. Basic Slag.
 Sown June 2. Variety - Peking (17852B)
 Harvested - Oct. 4. - Season 124 days -
 Yield $\frac{1}{2}$ acre 81 $\frac{1}{2}$ lb. = 1.36 bu.
 Bus. cal. per acre = 27.20 bu.

Plot I - 10 lbs. Fish Scrap.
Sown June 2. Variety - Peking (17852 B)
Harvested - Oct. 4. Season 24 days
Yield - $\frac{1}{2}$ acre - 84 lb. - 1.4 bu.
Bus. cal. per acre - 28.0 bu.

Plot II - 10 lbs. Nitrate of Soda.
Sown June 2. Variety - Peking (17852 B)
Harvested - Oct. 4 - Season 24 days
Yield - $\frac{1}{2}$ acre - 87 lb. - 1.45 bu.
Bus. cal. per acre - 29.0 "

Plot III - Check.
Sown June 2. Variety - Peking (17852 B)
Harvested - Oct. 4 - 24 days.
Yield - $\frac{1}{2}$ acre - 80 lb. - 1.33 bu.
Bus. cal. per acre - 26.60 bu.

Plot XIII- 10 lbs. Acid Phosphate
 5 " Sulfate of Potash
 2½ " Nitrate of Soda
 Sown June 2. - Variety - Pecking (17852 B)
 Harvested Oct. 4. Season 124 days
 Yield per ½ acre - 79 lbs. - 132 bus.
 Bus. cal. per acre - 26.40 bus.

Plot XIV- 15 lbs. Acid Phosphate
 12½ " Wood Ashes
 Sown June 2. - Variety - Pecking (17852 B)
 Harvested Oct. 4. - Season 124 days.
 Yield per ½ acre - 85 lbs. - 142 bus.
 Bus. cal. per acre - 28.40 bus.

Plot XV- 500 lbs. of Manure
 Sown June 2. - Variety - Pecking (17852 B)
 Harvested - Oct. 4. Season 124 days.
 Yield per ½ acre - 83½ lbs. - 139 bus.
 Bus. cal. per acre - 27.80 bus.

Plot XVI - Check.

Sown June 2 Variety - Peking (17852B)
Harvested - Oct. 4. Season 124 days
Yield $\frac{1}{2}$ acre plot - 77 lb. - 1.28 bu.
Cal. Bu. per acre - 25.60 bu.

Plot XVII - 200 lb. Slaked Lime.
Sown June 2 - Variety - Peking (17852B)
Harvested - Oct. 4 - Season 124 days
Yield of seed per plot = 92 lb. = 1.53 bu.
Cal. bu. per acre = 30.6 bu.

Plot XVIII - 100 lb. Slaked Lime.
Sown June 2 - Variety - Peking (17852B)
Harvested - Oct. 4. - Season 124 days.
Yield of seed - $\frac{1}{2}$ acre - 84 $\frac{1}{2}$ lb. - 1.41 bu.
Bu. cal. per acre - 28.20 bu.

Plot XIX - 5 lb. of Nitrate of Soda.
 Sown June 2 - Variety - Pringle (17852 B)
 Harvested - Oct. 4 - Season 124 days
 Yield - $\frac{1}{20}$ acre plot - 71 lb. 1.18 bus.
 Bus. cal. per acre - 23.6 bus.

Plot XX - 10 lb. Acid Phosphate -
 2 $\frac{1}{2}$.. Sulfate of Potash.
 Sown June 2 - Variety - Pringle (17852 B)
 Harvested - Oct. 4 - Season 124 days.
 Yield - $\frac{1}{20}$ acre - 67 $\frac{1}{2}$ lb. 1.12 bus.
 Bus. cal. per acre - 22.4 bus.

Rate of Planting

No.	Distance	Area	yield lbs. bud.	cal. bus. per. acre	Height
17852B	1 in.	1 rd.			
	2 "	" "			
	4 "	" "			
	6 "	" "			
	8 "	" "			
	10 "	" "			
	12 "	" "			
	18 "	" "			

Remarks:

No.	Distance	Area	yield lb. seed	cal. bus. per acre	Bright
17271	1 in.	1 sqd.			
	2 "	" "			
	4 "	" "			
	6 "	" "			
	8 "	" "			
	10 "	" "			
	12 "	" "			
	18 "	" "			
Remarks:					

No.	Distance	Area	yield per ^{per} ac. ^{ac.}	Cal. ^{no.} per ^{ac.} ac.	Hight.
22312	1 in.	1 rd.			
	2 "	" "			
	4 "	" "			
	6 "	" "			
	8 "	" "			
	10 "	" "			
	12 "	" "			
	18 "	" "			

Remarks =

Soybean Mixture

Soybeans (22538) and corn.

Variety 22538 is a vining variety and appears a good variety to grow with corn.

Sown June 8. Harvested

Did not climb the corn in only a few cases. On rather a poor piece of soil.

Plants 48-66 in. high. Branches many, vining, 14-24 in. long. Should try this variety again on a better piece of soil.

Soybeans (21999C) and corn.

Variety 21999C is a vining variety and appears a good variety to grow with corn.

Did not climb the corn very well but rather much better than 22538. Plants

40-50 in. high. Branches many, vining, spreading, 16-24 in. long.

Soybeans (191868) and corn.

Variety 191868 is a vining variety and appeared a good variety to grow with corn.

Sown June 8; Harvested

Made an excellent growth with corn.

Plants twined about the corn plants. See

photo. Apparently the best variety for corn.

48-74 in. high. Branches many, vining, spreading, 16-28 in. long.

Soybeans (22599) and corn.

Variety appeared to be a good variety to grow with corn.

Sown June 8; Harvested

But little better than 22588. 30-50 in. high.

Soybeans (1906) and corn.

Variety 1906 ag. appeared a good variety to grow with corn.

From June 8. Harvested

Has made an excellent growth. Think corn well. Uniform and good growth. 42 - 48 in. high.

Soybeans and corn.

Corn sown in hills - row 3.3 - corn hills 3 ft. in row. Soybeans to be sown at the last cultivation of corn, ^{about 9/6}

Soy bean (18227) sown at the last cultivation of the corn. Corn cut Sept. 16.

On Oct. 23, a fairly good stand resulted but the growth was rather poor. About 25% of the stand mature at this date. Plants 10-16 in. high. Not nearly as good as the plot of compass sown at the same time. Probably a late variety of bean would have given a better growth.

Soybeans and cowpeas. $\frac{3}{4}$ lb. of each mixed and sown in drill rows $3\frac{1}{2}$ ft apart for hay mixture.

Sown June 8. Harvested. 9/19

Has made an excellent growth. Plants erect slender, not giving 2nd bushy growth. Plants like those grown in shade. Makes an abundance of material to turn under. 24-26 in. high.

Between the corn rows about 3 ft. high. and ~~between the~~ in the corn rows about 24 in. high.

Soybeans and millet. Soy beans sown in cultivated rows June 8, 30 lb & acc. Millet sown at rate of 20 lb. per acre June 22 and harrowed in with cultivator. and 9/18

Soybeans, hairy vetch, and timothy - The soybeans and vetch sown in drill rows June 8. The timothy to be sown at the last cultivation of the beans.

Soybeans and corn in same hill in cultivated rows. Sown June 8.

Soybeans and corn in alternate hills in the same row.

Soy beans and corn - the rows rown between
the corn hills in same row. June 8

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Soybean Crosses.

Cr. No. = Cross No.

F = Flower color { P - Purple
W - White

P = Pubescence { T - Tawny.
G - Gray

G = Seed color.

Bi = Bicolored.

Br = Brown.

Bl = Black.

G = Green.

O.Y. = Olive yellow

S.Y. = Straw yellow

S = Seed shape.

O = Oblong. =

E - Elliptical

S - Subglobose

Z = Seed size.

L - large

M - Medium

S. - small.

D = Date cross made.

a = No. fls. pollinated.

b = " seed obtained

~~W = No. of plant or variety~~

G - Color of germ. { G - green
Y - yellow.

M = Maturity

N = No. of variety used.

Cr. No.	Males								Females								a	b	D.
	N	M	C	F	P	S	Z	G	N	M	C	F	P	S	Z	G			7/23
5665ag	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y	1		7/25
5666 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5667 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5668 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5669 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5670 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5671 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5672 ..	17267	L	O.Y.	P		E	L	Y.	17271	M. Z.	S.Y.	W		E	M	Y.	1		7/25
5673 ..	17267	L	O.Y.	W		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5674 ..	17267	L	O.Y.	W		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5675 ..	17267	L	O.Y.	W		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5676 ..	17267	L	O.Y.	W		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5677 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5678 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	W		E.	M	G	1		7/25
5679 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	W		E.	M	G	1		7/25
5680 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	W		E.	M	G	1		7/25
5681 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5682 ..	17267	L	O.Y.	P		E	L	Y.	24079A	M. E.	BL.	P		E.	M	G	1		7/25
5683 ..	17275	M. Z.	S.Y.	P		E	M	Y.	17861	M. Z.	BL.	W		E.	M	Y.	1		7/26
5684 ..	17275	M. Z.	S.Y.	P		E	M	Y.	17861	M. Z.	BL.	W		E.	M	Y.	1		7/26
5685 ..	17275	M. Z.	S.Y.	P		E	M	Y.	17861	M. Z.	BL.	W		E.	M	Y.	1		7/26
5686 ..	17275	M. Z.	S.Y.	P		E	M	Y.	17861	M. Z.	BL.	W		E.	M	Y.	1	x	7/26

Males									Females									a	z	D
Cr. No.	N	M	G	F	P	S	Z	G	N	M	C	F	P	S	Z	G				
5687 ag	17275	M. L	S.Y.	P		E	M	Y.	17861	M. L	BL	W		E	M	Y.	1		7/20	
5688 ..	17861	M. D	BL	W		E	M	Y.	17275	M. Z	S.Y.	P		E	M	Y.	1		7/20	
5689 ..	17861	M. Z	BL	W		E	M	Y.	17275	M. Z	S.Y.	P		E	M	Y.	1		7/20	
5690 ..	17861	M. Z	BL	W		E	M	Y.	17275	M. Z	S.Y.	P		E	M	Y.	1		7/20	
5691 ..	17861	M. Z	BL	W		E	M	Y.	17275	M. Z	S.Y.	P		E	M	Y.	1		7/20	
5692 ..	17861	M. Z	BL	W		E	M	Y.	17275	M. Z	S.Y.	P		E	M	Y.	1		7/20	
5693 ..	22876	M. Z	S.Y.	P		E	M	Y.	17261	M. Z	G	P		E	M	G	1		7/20	
5694 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1	x	7/20	
5695 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1		7/20	
5696 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1	x	7/20	
5697 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1		7/20	
5698 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1		7/20	
5699 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1	x	7/20	
5700 ..	22876	M.	S.Y.	P		E	M	Y.	17261	M.	G	P		E	M	G	1		7/20	
5701 ..	22876	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5702 ..	17261	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5703 ..	17261	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5704 ..	17261	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5705 ..	17261	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5706 ..	17261	M.	G	P		E	M	G	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5707 ..	22379	M.	S.Y.	W		E	M	Y.	22876	M.	S.Y.	P		E	M	Y.	1		7/20	
5708 ..	22379	M.	S.Y.	W		E	M	Y.	22876	M.	S.Y.	P		E	M	Y.	1		7/20	

[illegible]

[illegible]

	Males							Females							a	b	D
	N	M	C	F	P	S	Z	G	N	M	C	F	P	S	Z	G	
5753																	
5754																	
5755																	
5756																	
5757																	
5758																	
5759																	
5760																	
5761																	
5762																	
5763																	
5764																	
5765																	
5766																	
5767																	
5768																	
5769																	
5770																	
5771																	
5772																	
5773																	
5774																	
5775																	

Cr. between 8^m 8^m 1912 - also 5776
 5776

Composition of Hay at Different Dates

Whole plants	Water	Protein	Fiber	Nit. Ex.	Fats	Ash
<u>17852 B</u>						
Just in bloom. ⁰⁰⁴¹	5.33	17.09	23.31	34.60	1.45	18.22
Just in pod. ⁰⁰⁴²	5.28	19.31	26.49	35.66	1.87	11.39
Top leaves ^{begin to turn} yellow ⁰⁰⁴³	5.04	18.59	26.30	36.28	3.02	12.77
All of leaves fallen. ⁰⁰⁴⁴	5.25	16.64	25.13	34.93	8.79	9.06
Leaves begin to turn yellow						
<u>17280-</u>						
Just in bloom ⁰⁰²⁵	5.11	19.22	26.50	38.56	1.45	9.16
Just in pod ⁰⁰²⁶	5.35	12.72	30.82	42.50	1.06	7.55
Pods ² grown ⁰⁰²⁷	5.40	10.31	30.45	44.73	2.34	6.77
Top leaves turning yellow						
Pods full ⁰⁰²⁸	5.30	15.94	25.97	38.76	7.83	6.20
All of leaves fallen						
Leaves begin to yellow.						
17183 <u>17263</u>	5.61	2.			1.80	15.02
Just in bloom ⁰⁰²⁹	5.61	20.75	20.15	36.67	1.80	15.02
Just in pod ⁰⁰³⁰	5.60	19.56	26.96	36.53	1.81	9.54
Pods ² grown ⁰⁰³¹	5.24	17.13	26.27	40.07	3.30	7.99
Top leaves turning yellow						
Pods full ⁰⁰³²	5.23	18.06	24.92	33.79	8.64	9.36
All of leaves fallen						
Leaves begin to yellow						
<u>17271</u>						
Just in bloom ⁰⁰⁵³	6.15	15.15	23.59	42.56	2.01	10.54
Just in pod ⁰⁰⁵⁴	5.19	18.44	25.40	38.69	1.89	10.39
Top leaves turning yellow ⁰⁰⁵⁵	5.63	16.50	27.09	38.77	4.68	7.33
All of leaves fallen ⁰⁰⁵⁶	5.35	20.84	19.58	39.09	10.25	11.25
Leaves begin to yellow						

Whole Plant	Water	Protein	Fiber	N-F. Ext.	Fats	Ash
17269	4.86	18.69	24.91	39.01	1.74	10.79
⁰⁰³⁷ Just in bloom	4.86	18.69	24.91	39.01	1.74	10.79
⁰⁰³⁸ Just in pod.	5.87	17.00	29.64	37.24	1.55	8.70
⁰⁰³⁹ Top leaves turning yellow	4.46	7.56	51.39	38.77	.42	5.40
⁰⁰⁴⁰ All of leaves fallen.	5.87	20.63	23.10	38.38	4.62	7.40
Leaves begin to turn yellow						
172 19183						
⁰⁰³³ Just in bloom	5.71	19.47	24.84	37.04	1.63	11.31
⁰⁰³⁴ Just in pod.	5.68	16.91	29.22	37.76	1.58	8.85
⁰⁰³⁵ Pods 1/2 grown	5.45	16.69	26.32	38.83	5.11	8.40
⁰⁰³⁶ Top leaves turning yellow						
⁰⁰³⁷ Pods full green	5.61	15.78	21.92	38.22	8.40	10.07
All of leaves fallen						
Leaves begin to turn yellow						
21999 - Taha						
⁰⁰⁴⁵ Just in bloom	5.21	17.81	27.66	34.01	2.19	13.12
⁰⁰⁴⁶ Just in pod.	5.44	16.96	26.91	40.82	1.49	8.38
⁰⁰⁴⁷ Top leaves turning yellow	5.60	17.19	25.92	39.43	2.42	9.44
⁰⁰⁴⁸ All of leaves fallen	5.52	13.50	26.74	39.53	7.44	7.27
Leaves begin to turn yellow						
17852 -						
⁰⁰⁴⁹ Just in bloom	6.25	19.56	24.39	36.21	1.62	11.97
⁰⁰⁵⁰ Just in pod.	5.17	19.81	24.90	37.21	1.61	11.30
⁰⁰⁵¹ Top leaves turning yellow	6.00	15.06	26.89	39.09	2.14	10.82
⁰⁰⁵² All of leaves fallen	6.16	13.09	22.40	40.59	7.34	10.50
Leaves begin to turn yellow.						

Oil Content - Fertilizer Tests.

Varsity - Feking - 17852 B. =
Arlington Farm - 1911

Plot Number.	Oil Content
Plot one	
" two	
" three	
" four = Check	
" five	
" six	
" seven	
" eight = Check	
" nine	
" ten	
" eleven	
" twelve = Check	
" thirteen	
" fourteen	
" fifteen	
" sixteen check.	
" seventeen	
" eighteen	
" nineteen	
" twenty	

Soybean Selection Work.

Parent					Progeny 1911													
No.	Source	Pubr.	Flk.	Seed Col.	Flour		Pro. No.		O. Y.	S. Y.	Gr.	Pr.	O. Y.	S. Y.	Gr.	S. Y.	Bl.	S. Y.
					P	W	T	G										
5501	ag 3391	ag	T	P	O.Y. & Bl.	19	1	11	9	3		5	3	6	3			
5502	.. 3391	..	T	P	O.Y.	13 ^{S.P.}	3	11	4	2		3	1	6	2			1
5503	.. 3391	..	T	P	O.Y.	17	3	14	6	4		3	1	11				
5504	.. 3434	..	T	W	O.B	4	219	177	46		1	1	218			1	1	
5505	.. 3466	..	T	W	O.B			7				7						
5521	.. 3386	..	G	W	G				9	2		3			4			
5522	.. 3386	..	G	P	S.Y.				69	49		13		7				
5523	.. 3386	..	T	P	O.Y.			210				13	9			70	18	100
5524	.. 3386	..	T	P	O.Y. & Bl.	73	25	70	28	46						29		23
5525	.. 3386	..	T	P	O.Y.	127	44	144	27	67						103		1
5526	.. 3386	..	T	P	O.Y. & Bl.	152		152		9		12	8	47	28		48	
5527	.. 3386	..	T	P	S.Y. & Bl.	184		184			88		1		9	86		9
5528	.. 3353	..	T	W	O.Y.		62	46	16	44	8				10			
5529	.. 3353	..	G	P	S.Y.	47	13	4	56	1	43				1	15		
5530	.. 3353	..	G	W	S.Y.	1	55	6	50	6	45					5		
5531	.. 3353	..	G	P	S.Y.	35			35		29					6		
5532	.. 3353	..	T	P	O.Y.	77	33	96	14	108					2			
5533	.. 3353	..	T	P	S.Y.	55		55	+		55							
5534	.. 3408	..	T	P	S.Y.	9			9		9							
5535	.. 3408	..	T	P	Bl. & K.	31		+		31								
5536	.. 3408	..	T	P	S.Y.	40			40		40							
5537	.. 3408	..	T	P	S.Y. & Bl.	48			48		48							

Parent					Progeny 1911													
No.	Source	Pube	Fls.	Seed Ch	Fls.		Pube		O	S	O.Y. + Br.	O.Y. + Br.	S.Y. + Br.	S.Y. + Br.	Br.	Br.	Br. + Br.	Br.
					P	W	T	G										
5538 ag	3408 ag	G	P	S.Y. & Br.	39		2	39		39								
5539 ..	3408 ..	T	P	S.Y. & Br.	54			54		54								
5540 ..	3408 ..	T	P	S.Y. & Br.	61			61		61								
5541 ..	3793 ..	G	W	O.Y.	3	75	28			59								19
5542 ..	3793 ..	G	W	Br.	7	66	73			8								65
5543 ..	3793 ..	G	P	Br.	74	25	3	96		5								94
5544 ..	3793 ..	G	P	O.Y.	45	8	3	45		48								
5545 ..	3325 ..	G	P	Br.	53		2	51										53
5546 ..	3325 ..	G	P	Br.	80		3	77		1								79
5547 ..	3325 ..	T	P	W	60			60										60
5548 ..	3713 ..	T	P	S.Y.	84	22	106			105								
5549 ..	3713 ..	G	P	S.Y.	54	19		70		72								
5550 ..	3713 ..	T	W	S.Y.	5	83	88			88								
5551 ..	3336 ..	G	W	S.Y. & Br.	70	1		71		71								
5552 ..	3336 ..	T	P	S.Y.	52	50		52		61								
5553 ..	3336 ..	G	W	O.Y. & Br.	3	44				45		2						
5554 ..	3336 ..	G	P	S.Y.	23	3				25			1					
5555 ..	3341 ..	T	W	S.Y.	3	92		95		95								
5556 ..	3341 ..	G	W	O.Y.		84		83		34								15
5557 ..	3341 ..	T	P	O.Y.	44	24	42	26		46		1						
5558 ..	3332 ..	T	P	O.Y.	37	11	33	15		40		1						
5559 ..	3332 ..	G	P	S.Y.	7	1		8		8								

Parent					Progeny 1911												
No.	Source	Pulse	Fls.	Seed Color	Flowers		Pulse		S.Y.	O.Y.	Bl.	Br.	G.	S.Y.	O.Y.	S.Y.	Bl.
					P	W	T	G									
5560 ag.	3332 ag.	T	W	O.Y.		28	28		4	24							
5561 ..	3332 ..	T	W	O.Y.	1	46	47		6	40							1
5562 ..	3332 ..	T	P	O.Y. & Br.	50	9	59		13	46							
5563 ..	3332 ..	G	W	S.Y.	1	12	1	12	4	9							
5564 ..	3323 ..	T	W	Bl.		50		50			27	23					
5565 ..	3323 ..	T	W	Bl.		52		52				52					
5566 ..	3323 ..	T	W	O.Y.		97	97			79		18					
5567 ..	3428 ..	T	P	S.	32	14	46			45				1			
5568 ..	3428 ..	T	P	S.Y. & Br.	33		33			33							
5569 ..	3428 ..	T	P	S.Y. & Br.	59	29	88			88							
5570 ..	3428 ..	T	P	S.Y. & Br.	45	13	58		37	19				2			
5571 ..	3412 ..	G	P	S.Y. with major markings	113			113		105							8
5572 ..	3457 ..	G	P	Br.	151			151	2		1	148					
5573 ..	3457 ..	T	P	S.Y. & Br. major	70		70		69							1	
5574 ..	3334 ..	T	P	Bl. & Br.	60	25	85										85
5575 ..	3334 ..	G	W	major		49		49									49
5576 ..	3474 ..	G	P	Br.	71	13		84				84					
5577 ..	3474 ..	G	P	S.Y.	135	48		183	41	142							
5578 ..	3474 ..	G	W	Br.		61		61		1		60					
5579 ..	3474 ..	G	P	S.Y.	74	21	3	92		39				3			53
5580 ..	3450 ..	T	P	S.Y.	12	7	19		15	3	1						
5581 ..	3630 ..	T	P	Bl.	109		109					80	27				

Parent					Progeny 1911													
No.	Source	Flr.	Pulse	Seed color	Flowers		Pulse		S. Y.	Gr.	Bl.	Gr.	O. Y.	O. Y. & Bl.	S. Y.	S. Y.	Bl.	Bl.
					P	W	T	G										
5582ag	3630ag	P	T	Olive	99		99				1	98						
5583	3612	P	T	S. Y. & O. Y.	70	22	71	21	22	34	19	6	11					
5584	3612	P	T	Br.	70		70					70						
5585	3612	P	T	Bl.	52	14	66					40						26
5586	3612	W	T	Br.	1	79	79	1	1			79						
5587	3612	P	T	O. Y. & Bl.	59	20	79		63		10							6
5588	3612	P	T	Bl.	1	162	163				70		1		1			91
5589	3612	P	T	Br.	95		75					75						
5590	3612	P	T	Bl.	80		80		1		22							57
5591	3774	P	G	Br.	93	36	2	127				129						
5592	3774	P	T	O. Y.	54	20	74			61	12		1					
5593	3774	P	T	O. Y.	83	28	111		64		24	23						
5594	3774	W	T	Bl.		W	T				Bl.							
5595	3491	P	T	S. Y.	202		202		200							2		
5596	3491	P	T	O. Y. & Bl.	15		15			13						2		
5597	3325	P	T	Olive	66		49	17				66						
5598	3325	P	T	O. Y.	81		81		18	40		6	1					16
5599	3768	P	G	Br.	184		17	167	21		3	70						
5600	3768	P	T	S. Y.	76		76		57		19							
5601	3768	P	T	Bl.	74	19	93		1	1	91							
5602	3768	W	T	Bl.	3	93	76	20	6		73	17						
5603	3499	P	T	O. Y. & Bl.	34	10	44		12	31				1				

Parent					Progeny 1911											
No.	Source	Fl.	Pub.	Red color	Flowers	Pub.	S.Y.	O.Y.	Bl.	Br.	G	O.Y.	O.Y.	S.Y.	S.Y.	Bl.
					P	W	T	G				Br.	Bl.	Bl.	Br.	Bl.
5604	Aug. 3499	P	T	O.Y. & Br.	109	47	156		152					4		
5605	" 3499	P	T	O.Y.	126		103	23	5	119				1		1
5606	" 3499		T	O.Y.	1	133		134	129							5
5607	" 3499			O.Y. & Br.	60		60		60							
5608	" 3499	W	G	O.Y. & Br.	4	45		49	13	35				1		
5609	" 3634	P	T	Bl.	77		77		19		58					
5610	" 3634	P	T	Uliv.	82	38	120				119					1
5611	" 3634	P	T	S.Y.	26	11	37		33							4
5612	" 3634	W	T	O.Y. & Br.		47	47		2	35		7		2		1
5613	" 3634	W	T	Bl.	1	181	182			1	134	45				1
5614	" 3634	W	T	Uliv.	1	114	115			1	1	113				
5615	" 3633	P	T	Bl. & O	46		46		44		12					20
5616	" 3637	W	T	S.Y.	78	30	82	26	82	5	5	6			1	9
5617	" 3637	W	T	Bl. & O	2	238	162	76	41	1	44	11		110	4	27
5618	" 3637	W	T	Br.	5	246	11	240	1	6	5	239				
5619	" 3613	P	T	Bl.	141	23	164				162		1			+
5620	" 3613	W	T	Bl.		53	53				15		33			+
5621	" 3613	W	T	Bl.		w	T				Bl.					5
5622	" 3617	W	T	Bl.			47		2		36					9
5623	" 3617		T	S.Y. & Br.	43	18	61			44						1/6
5624	" 3617		T	O.Y. & Br.	152		52			40				12		
5625	" 3617		T	O.Y. & Br.	89		89			11	17			57		4

Parent				Progeny 1917														
No.	Source	Flr.	Purtr	seed color	Fls. P	Fls. W	Purtr T	Gr	S.Y.	O.Y.	S.Y. Br.	O.Y. Br.	S.Y. Br.	O.Y. Br.	Br. Br.	Br. Br.	Br. Br.	Br. Br.
5626	ag. 3617		T	Bl.	35		35								27		8	
5627	.. 3617	P	T	S.Y.														
5628	.. 3639		T	O.Y.	68	14	82			82								
5629	.. 3637	W		Br.														
5630	.. 3639		T	Bl.	61	18	79								79			
5631	.. 3639		T	O.Y. & Br.	101		101			80		21						
5632	.. 3335	W	T	O.Y. & Br.		21	14	7	2	17				2				
5633	.. 3378	P	T	O.Y. & Br.	54		41	13	19	32			1	2				
5634	.. 3303	P	T	O.Y.	14		14		1	10					3			
5635	.. 3303	P	T	Bl.	27		27								27			
5636	.. 3315	P	T	Br. & Br.	31		31											31
5637	.. 3335	P	G	S.Y. & Br.	53			53	53									
5638	.. 3327	W	T	O.Y. & Br.	1	57	39	19		42				2		14		
5639	.. 3327	W	T	Ulliv		80	62	18		1						79		
5640	.. 3327	W	G	Br.		51		51								51		
5641	.. 3327	W	G	O.Y.		19		19		15						4		
5642	.. 3327	P	T	S.Y.	10	4	12	2		18						2		
5643	.. 3346	P	T	O.Y.	76	12	88		2	59					21		6	
5644	.. 3326	P	T	S.Y.	0		T		S.Y.									
5645	.. 3346	P	G	O.Y. & Br.	38			38		38								
5646	.. 3346	P	T	O.Y.	75		75			75				1				
5647	.. 3370	P		Br. & S.Y.	49		49		47				2					

Parent					Progeny 1911												
No.	Source	Flr.	Puke	Seed Color	Flower Puke				S.Y.	O.Y.	S.Y. Bl.	O.Y. Bl.	S.Y. Br.	O.Y. Br.	Bl.	Br.	Bl. Br.
					P	W	T	G									
5648 ag.	3327 ag.	W	T	S.Y.		54	40	14	1	49				4			
5649 "	3307 "	P	T	S.Y.	11	31	34	8	9	15		13		2	3		
5650 "	3307 "	P	T	Bl.	30		30								30		
5651 "	3709 "	W	G	Br.		109		109								109	
5652 "	3709 "	P	T	Bl.	21	2	23								20	3	
5653 "	3709 "	P	T	S.Y.	65		65		12	50		3					
5654 "	3709 "	W	G	Br.			4	66								70	
5655 "	3454 "	P		S.Y. ^{and} ^{major} ^{marking}	39		39		17								22
5656 "	3454 "	P		Major	91		91			1					2		88
5657 "	3454 "	P	G	O. & Major	67		7	60		29		1				13	24
5658 "	3319 "	W	T	S.Y.	1	41	42	37			4						18
5659 "	0851	P	T	S.Y. & Bl.	81		81		75	2	3		1				
5660 "	0851	P	T	S.Y. & Bl.	53		53		30		23						
5661 "	0851	P	T	S.Y. & Bl.	81		81		56		25						
5662 "	0851	P	T	S.Y. & Bl.	78		78		67		11						
5663 "	0851	P	T	S.Y. & Br.	83		83		81		1		1				
5664 "	0851	P	T	S.Y. & Bl.	156		156		150		6						

Soybean Photographs. 1911.

<u>Print No.</u>		<u>Var. no.</u>
8267	Soybeans sown in corn at the last cultivation.	18227
8273	One-twentieth acre plot of Acme in seed yield test.	14954
8277	One-twentieth acre plot of 22899 ag in seed yield trial.	22899g.
8285	One-twentieth acre plot of 1907 ag. in seed yield trial	1907 ag.
8288	One-twentieth acre plot sown in corn and 19186 D - this variety is a climbing variety. Photo shows the plants over the corn.	19186 D
8289	One-twentieth plot in corn and 19186 D - as 8288.	19186 D
8290	Conquest sown in corn at the last cultivation. For comparison with 8267. - plot sown in soybeans.	
8291	One-twentieth plot sown in corn and 1906 ag. - this variety a climbing variety - cf. 8288.	1906 ag.
8292	One-twentieth acre plot sown in early amber sorghum and 19186 D for same purpose as 8288 with which compare.	19186 D

Photo. No		Var. no.
8293	One-twentieth plot of 1822 ag. in seed yield trial of varieties	1822 ag.
8294	One-twentieth plot of 1822 17278 in seed yield trial of varieties. Rather a poor negative.	17278
8295	One-twentieth plot of 17861 in seed yield trial of varieties	17861
8296	One-twentieth plot of 1825 ag. in seed yield trial of varieties	1825 ag.
8297	One-twentieth plot of Cloud in seed yield trial of varieties	16790
8298	17852 B - $\frac{1}{20}$ acre plot. Nitrate of soda - $\frac{1}{2}$ 10 lbs. Plot "11.	Fert. " 11
8299	17852 B - $\frac{1}{20}$ acre plot - Slaked lime - 200 lbs.	Fert. " 17
8300	17852 B - $\frac{1}{20}$ acre plot. Acid phosphate - 15 lbs. Wood ashes. - $12\frac{1}{2}$ "	Fert. " 14
8301	17852 B - $\frac{1}{20}$ acre plot. Acid phosphate - 10 lbs. Sulfate of potash - $2\frac{1}{2}$ "	Fert. " 20
8302	17852 B - $\frac{1}{20}$ acre plot. Fish scrap. - 10 lbs.	Fert. " 10

Photo. No.		Var. No.
8303	17852 B - $\frac{1}{2}$ acre plot. Acid phosphate - 10 lbs. Sulfate of potash - 5 lbs. Nitrate of soda - $2\frac{1}{2}$ "	Fert. # 13
8304	17852 B - $\frac{1}{2}$ acre plot. Basic slag - 15 lbs.	Fert. # 9
8305	17852 B - $\frac{1}{2}$ acre plot. Murrate of potash - 10 lbs.	Fert. # 6
8306	17852 B - $\frac{1}{2}$ acre plot. Nitrate of soda - $7\frac{1}{2}$ lbs. Murrate of potash - 9 lbs.	Fert. # 1
8307	17852 B - $\frac{1}{2}$ acre plot. Acid phosphate - 10 lbs. Basic slag - $12\frac{1}{2}$ lbs.	Fert. # 3
8308	17852 B - $\frac{1}{2}$ acre plot. Acid phosphate - 10 lbs. Murrate of potash - $2\frac{1}{2}$ "	Fert. # 2
8309	17852 B - $\frac{1}{2}$ acre plot. Acid phosphate - 15 lbs.	Fert. # 7
8310	17852 B - $\frac{1}{2}$ acre plot. Sulfate of potash - 10 lbs.	Fert. # 5
8311	17852 B - $\frac{1}{2}$ acre plot. Check.	Fert. # 4

Photo. No.

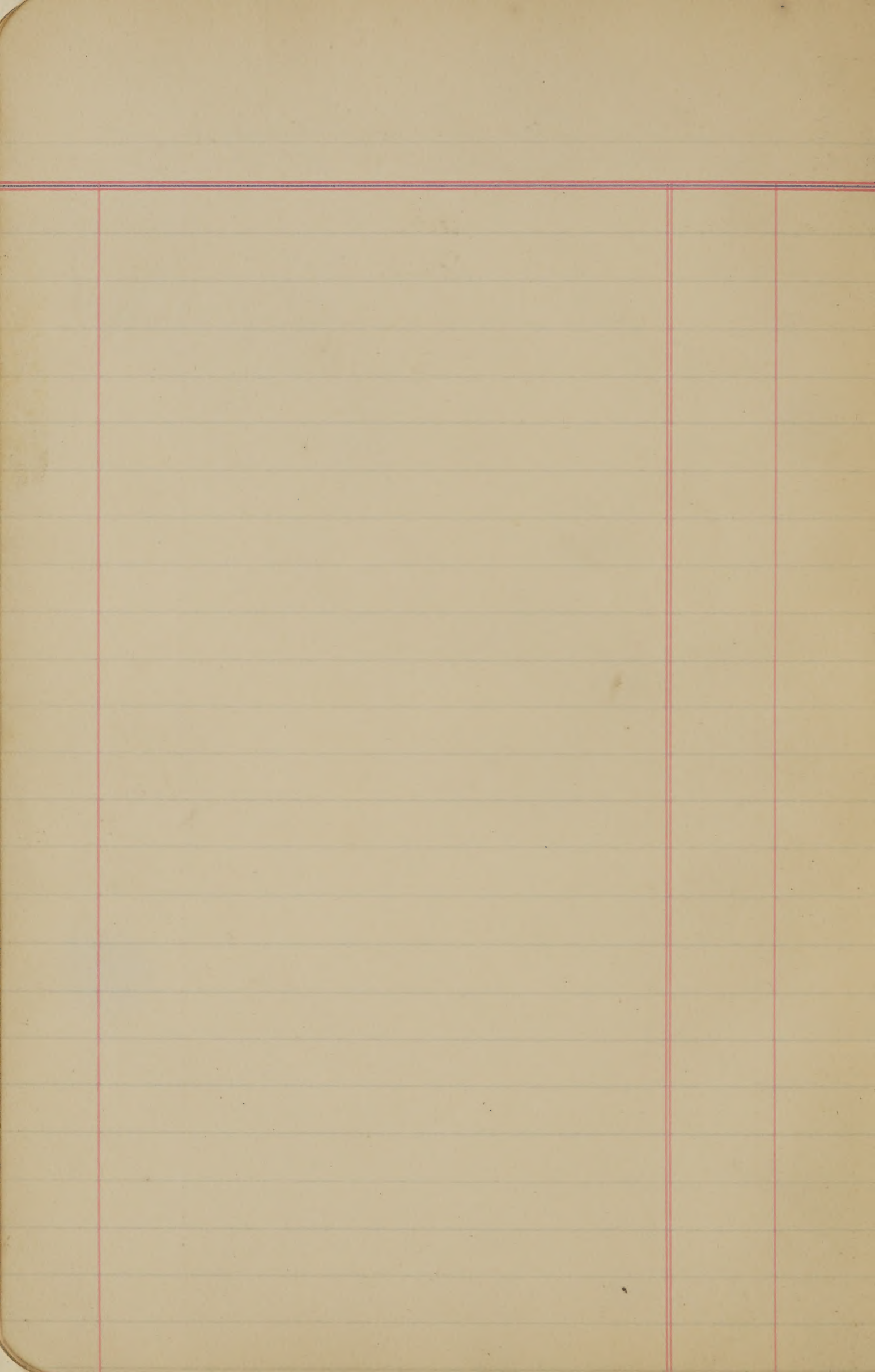
Var. No.

8312

One-twentieth acre plot B
Barclay-grown in variety trial.

23232

Zero Uor. of Soybeans.



Fertilizer Constituents

36.

Different stages of growth - different parts of plant					H ₂ O	N	P ₂ O ₅	K ₂ O
No.						%		
17269	Full bloom	0070	Roots	3.41	1.40	0.32	0.60	
"	"	0071	Stems	4.00	1.83	0.46	1.21	
"	"	0072	Leaves	5.40	3.59	0.56	1.28	
	Pods half-grown	0073	Roots	3.82	1.05	0.26	0.50	
"	"	0074	Stems	3.79	1.80	0.41	.89-.92	
"	"	0075	Leaves	5.76	3.18	0.50	0.97	
"	"	0076	Pods	4.62	3.56	0.87	2.12	
"	"	0077	Seed	3.90	5.95	1.28	1.80	
	Plants mature	0078	Roots	3.91	0.64	0.11	0.22	
"	"	0079	Stems	4.27	1.01	0.22	0.58	
"	"	0080	Leaves			0.25		
"	"	0081	Pods		1.25	0.25	1.23	
"	"	0082	Seed		6.37	0.38	1.89	
	Pods full grown	0083	Roots		0.96	0.22	0.49	
"	"	0084	Stems		1.08	0.26	1.25-1.00	
"	"	0085	Leaves		2.16	0.34	0.75	
"	"	0086	Pods		1.29	0.26	1.90	
"	"	0087	Seed		6.51	1.36	1.82	

1910 Saybraz Crosses.

5506 Ag. Hybrid made Aug. 18. 1910.

Male - 14954 acme - seed color - straw yellow.
Pubescence - tawny.
Flowers - white.

Late maturing

Female. 21755 - Early Ugenaw - seed color - brown
Pubescence - tawny
Flowers - white

Very Earliest maturing

1st. Gen. seed color - brown - sown in green house.
2nd. " " " straw yellow - cloudy.  
Pubescence tawny -

3rd. Gen. seed color

5506 A - Ag. Hybrid made Aug. 18. 1910.

Male - 14954 - acme - seed color - straw yellow
Pubescence - tawny
Flowers -

Late maturing -

Female - 21755 - Early Ugenaw - seed color brown
Pubescence - tawny
Flowers - white

Very early maturing

1st. Gen. seed color brown - sown in green house

2nd. " " " straw yellow with blackish saddle.

hilum black.

5507 ag. - Hybrid made Aug. 18. 1910.

Male - 84952 - Shanghai - seed color black.

Pubescence - gray
Flowers - white
Germ - green.

Female - 21755 - Early Algerian - seed color brown

Pubescence - tawny
Flowers - white
Germ - yellow

Very Early maturing

1st. Germ. seed color brown - soon in greenhouse

2nd " " " black - green germ.

5508 ag. - Hybrid made Aug. 18. 1910.

Male - 14952 - Shanghai - seed color black.

germ - green.
Pubescence - gray
Flowers white

Female - 17251 - Buckshot - seed color black.

Pubescence tawny
Flowers - purple
Germ - yellow
Early maturing

1st germ. seed color black - yellow germ.

2nd " " " " " " " " " " " "

5508 ~~aj~~ - Hybrid made Aug. 18, 1910.

Male - ~~Shanghai~~ - 14952 - Seed color black.

Pubescence - gray.

Flower - white

Green - green

Late maturing.

Female - 17251 - Buckshot - Seed color black

Pubescence tawny

5509 ag: Hybrid track Aug. 18. 1910.

Male. 17267 - Hoge: seed color - olive yellow

Pubescence - gray.

Flowers - white.

late maturing

Female - 21755 - Early German - seed color brown

- Pubescence - tawny

Flowers - white

very early maturing

1st gen. seed color brown. Skin in greenhouse

2nd .. " " olive yellow - dusky brown 

Pubes. tawny. Liliun brown.

3rd gen.

5511 ag - Hybrid made Aug. 19. 1910.

Male - 21999D - Seed color Olive yellow.

Pubescence - Tawny

Flowers - Purple

late maturing

Female - 21755 - Early Agave - Seed color - brown

Pubescence - Tawny

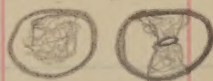
Flowers - white

very early maturing

1st. Gen. seed color brown. Sown in green house

2nd. Gen. " " " " Olive yellow. Smoky (black) about

the hilum. Pubescence tawny



3rd. Gen.

5513 ag. Cross made Aug. 18, 1910.

Male - 14952 - Shanghai - seed color - black

Pubescence - ~~tawny~~

Flowers - white

Green - green

Late maturing

Female - 21755 - Early Uppman - seed color - brown

Pubescence - tawny

Green - yellow

Flowers - white

1st. gen. seed color brown - grown in greenhouse

2nd. " - " - black - yellow green

3rd. gen. pubescence tawny

5514 A-ag. Hybrid made Aug. 17, 1910.

Male - 1219998 - head color - olive yellow.

Pubescens - Tanning

Flower - purple.

Later maturing

Female - 21755 - Early Ugnaw - Seed color - brown

Subsciner-Larven

Flowers - white

1st. gen. seed color brown.

2nd Straw yellow - blackish

Saddles speckled with yellow. black lining

3rd. Jan -

Oil Content - Picking Variety - Different Sources.

State	Post Office	Grower	Date Sown	Date Harvested	Oil Content
Alab. ⁺	Camden	C. E. Tait.			
" ⁺	Wilstead	T. S. Carr.			
Ariz. ⁺	Aguila	Frank Spruger			
" ⁺	Sacaton	E. W. Hudson			
Ark. ⁺	Swains	J. R. Paxton			
" ⁺	Walnut Ridge	E. H. Tharpe			
Dal.	Harwark	Ag. Expt. Sta.			
Fla. ⁺	Ferdinandia	W. E. Page			14.70
"					
"					
"					
Ga. ⁺	Turnerville	John E. Miller			
"					
"					
"					
Ill. ⁺	Farina	H. R. Irish			
Ind. ⁺	Boonville	Thomas Seales			16.40
" ⁺	Michigan City	Tom. Gilroy			
Ky. ⁺	Lebanon	John C. Duncan		X	
La.	Coushatta	A. C. Howard			
"	New Orleans	Aristide Hopkins			
Md.	Brighton	August Stabler		X	

State	Post Office	Grower	Date sown	Date Harvested	Net Content
Miss.	Crawford	L. H. Hopkins			19.53
"	Brookfield	Gro. Sharar			
"					
Mo.	Wentworth	J. F. Spillman			
"	Jaymowr	R. C. Giller			
N. J.	Plainsboro	H. W. Jeffers	X		
"	Norma	Meyer Goldman			18.60
"					
N. C.	Washington	J. H. Hodges.			
"	Towncrick.	G. H. Bellamy.			
Ohio.	Un Comertown	U. F. Regula			17.25
"	Cadiz.	J. W. R. Smith.			
"					
"					
Okla.	McCloud.	Evans White	X		
"					
Pa.	Bedford	S. T. Diehl.			
"	Fishertown	C. R. Miller			
"	Everett	D. E. Smith.			
"					
"					
S. C.	Vance	G. C. Shuler.			
"	Vannilla	E. W. Peoples	X		
"					

State	Post Office	Gover	Date sown	Date harvested	Clil Content
Tenn. +	Springfield	A. B. Porter.			
" +	Jackson	J. T. Kieth.			
"	Winchester	C. S. Fourny.			
Tex.	Cleburne	J. A. Arnold			
"	Joshua	John Harrison			
"	San Saba	James Burns	X		
"	Cherokee	P. A. Cook			
"	Burleson				15.60
"					
"					
Va. +	Arlington Farm	F. C. D.			
" +	Arlington Farm	F. C. D.			
"	Newport News	R. G. Bickford			
" +	Williamsburg	J. A. Bachtel			15.78
" +	Manassas	H. F. Buttore			15.55
"					

Frost Resistance

Variety Field Trial.

No.	Name	actual yield. lbs. 1/20 acres	est. per acre lbs. 1 acre
1822		71	23.6
1825		61	20.3
1844		55	18.3
1844		74	24.6
1853			
1853			
1854			
1907		50	16.6
3691		70	23.3
3747		64	21.3
14954		79	26.3
16790		55	18.3
17252C		75	25.00

Shattering of Srd.

14880	Horrebrans		
14881	" "		
13990	Serradella		
17789	"	18' 8"	
17839		53'	
25272		53'	

189
625
948
374
113
118
111

X

117, 118, 119

